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Michael E. Thomas et al.FILING DATE  
September 22, 2003GROUP  
1742

## U.S. PATENT DOCUMENTS

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
JL	AA 6,024,847	02-2000	Rosenberg et al.			
JL	AB 2,949,357	08-1960	Resnick			
JL	AC 5,171,379	12-1992	Kumar et al.			
JL	AD 5,403,458	04-1995	Hartig et al.			
JL	AE 5,209,835	05-1993	Makino et al.			

## FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
JL	AF JP1092558	04/1989	Japan				
JL	AG GB 810533	03/1959	GB				
JL	AH JP57019372	02/1982	Japan				
JL	AI JP200273623	10/2000	Japan				
JL	AJ SU1582683	09/1996	SU				
JL	AK 252,442	06/1960	AU				
JL	AL 55-179784	12/1980	Japan				
JL	AM 5-255843	10/1993	Japan				

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

JL	AN	Hughes et al., "Grain Subdivision and the Development of Local Orientations in Rolled Tantalum" Tantalum, The Minerals, Metals & Materials Society, 1996, pgs. 257-262. (Year is sufficiently early so that the month is not an issue.)
JL	AO	ASTM Standard Specification for Tantalum and Tantalum Alloy Plate, Sheet, and Strip, pgs. 558-561, 1992. (Year is sufficiently early so that the month is not an issue.)
JL	AP	Arlt, Jr., "Sulfonation and Sulfonation to Thorium and Thorium Compounds" Kirk-Othmer Encyclopedia of chemical Technology vol. 22, pp. 541-564, (1993), Year is sufficiently early so that the month is not an issue.)
JL	AQ	Kumar, et al. "Effect of Intermetallic Compounds of the Properties of Tantalum" Materials Research Society Symposium Proceedings, vol. 322, pgs. 413-422, 1994. (Year is sufficiently early so that the month is not an issue.)
JL	AR	Kirkbride et al., "The Effect of Yttrium on the Recrystallization and Grain Growth of Tantalum", J. Less-Common Metals, vol. 9, pp. 393-408, 1965. (Year is sufficiently early so that the month is not an issue.)
JL	AS	National Research Corporation Press Release, pgs. 1-4, July 1964.
JL	AT	National Research Corporation Data Sheet "SGS Tantalum", pgs. 1-7, no date.
JL	AU	Kumar, et al. "Effect of Intermetallic Compounds of the Properties of Tantalum" Refractory Metals & Hard Materials, vol. 12, pgs. 35-40, 1994. (Year is sufficiently early so that the month is not an issue.)
JL	AV	Klein et al., "Inhomogeneous Textures in Tantalum Sheets" Materials Science Forum, vol. 157-162, pgs. 1423, (1994). (Year is sufficiently early so that the month is not an issue.)
JL	AW	Clark et al., "Influence of Transverse Rolling on the Microstructural and Texture Development in Pure Tantalum", Metallurgical Transactions, vol. 23A, pgs. 2183-2191, August 1992.

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John P. Shuck

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AB	5,939,788	08-1999	McTeer			
AB	4,903,117	02-1990	Okamoto et al.			
AC	6,521,173	02-2003	Kumar et al.			
AD	5,372,659	12-1994	Lamaze et al.			
AE	4,830,665	05-1989	Winand			

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	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
AF	05097408	04/93	JP (abstract)				
AG	0 442 752 A1	08/91	EP				
AH	0 928 977 A1	07/99	EP				
AI	JP61031992A	02/86	JP (abstract)				
AJ	WO 02/00959 A1	01/02	WO				
AK	09-025562	28.01.1997	Japan				
AL	56071955A	15.06.1981	Japan				
AM	02-173222	04.07.1990	Japan				

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AN	Raabe, et al., "Texture and Microstructure of Rolled and Annealed Tantalum", Materials Science and Technology, Vol. 10, pgs. 299-305, April 1994.
AO	Wright et al., "Texture Gradient Effects in Tantalum", International Conference on Textures of Materials, 7 pgs., September 1993.
AP	Wright et al., "Textural and Microstructural Gradient Effects on the Mechanical Behavior of a Tantalum Plate", Metallurgical Transactions A, 25A (1994), pgs. 1-17. (Year is sufficiently early so that the month is not an issue.)
AQ	Clark et al., "Effect of Processing Variables on Texture and Texture Gradients in Tantalum", Metallurgical Transactions A, Vol. 22A, September 1991, pgs. 2039-2047).
AR	Kumar et al., "Corrosion Resistant Properties of Tantalum" Corrosion 95, Paper No. 253, 14 pages. (No date)
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PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
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JH	AA 5,110,637	05-1992	Ando			
JH	AB 6,451,402 B1	09-2002	Nee			
JH	AC 6,417,105 B1	07-2002	Shah et al.			
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	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
JH	AF EP0872572 A1	10-1998	EPO				
JH	AG WO 98/49357	11-1998	PCT				
JH	AH WO 00/13235	09/03/2000	PCT				
JH	AI 08120445	14/05/1996	Japan				
JH	AJ FR 2 585 730 A1	08/01/1985	France				
JH	AK GB 2 202 237 A	21/09/1988	GB				
JH	AL 11074348	16/03/1999	Japan				
JH	AM 2000012539	14/01/2000	Japan				

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JH	AN	Knotek et al., "The Structure and Composition of Ti-Zr-N, Ti-Al-Zr-N and Ti-Al-V-N Coatings" Materials Science and Engineering, A105/106, December 1988, pgs. 481-488.
	AO	
JH	AP	Sakamoto et al., "Preparation and Microstructure of Reactively Sputtered Ti <sub>1-x</sub> Zr <sub>x</sub> N Films" Thin Solid Films 228, May 1993, pgs. 169-172.
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ATTY. DOCKET NO.  
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Michael E. Thomas et al.

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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>JS</i>	AA	4,895,770	01-1990	Schintlmeister et al.			
<i>JS</i>	AB	6,396,207	05-2002	Hasegawa et al.			
<i>JS</i>	AC	6,210,634	04-2001	Ishigami et al.			
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							Yes	No
<i>JS</i>	AM	JP08255912	01-1996	Japan				
	AN						X	
	AO							
	AP							
	AQ							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

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EXAMINER *John F. Shuck* DATE CONSIDERED *11-29-04*

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				FILING DATE September 22, 2003		GROUP 1742	
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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	6,539,393	03-2003	Hicks et al.			
	AB	6,462,302 B1	11-2002	Li et al.			
	AC	6,723,187 B2	04-2004	Segal et al.			
	AD	2003/0132108 A1	07-2003	Takahashi et al.			Jan. 14, 2003
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		Document Number	Date	Country	Class	Subclass	Translation
	AM						Yes No
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* Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
<i>JS</i>	AA	6,176,944 B1	01-2001	Snowman et al.				
<i>JS</i>	AB	6,063,254	05-2000	Rosenberg et al.				
<i>JS</i>	AC	4,189,358	02-1980	Scarpellino, Jr. et al.				
<i>JS</i>	AD	US2004/0025986A1	02-2004	Perry et al.			Aug. 8, 2002	
<i>JS</i>	AE	US2004/0011432A1	01-2004	Podlaha et al.			Jul. 17, 2002	
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FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
<i>JS</i>	AM	363014864A	01-1988	Japan (abstract only)				
	AN							
	AO							
	AP							
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
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<i>John F. Shuck</i>				11-29-04				
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